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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/678,783	10/04/2000	Nicholas W. Dawes	551P08US-1	6059
20779	7590	08/22/2005	EXAMINER DUONG, FRANK	
SHAPIRO COHEN P.O. BOX 3440 STATION D OTTAWA, ON K1P6P1 CANADA			ART UNIT 2666	PAPER NUMBER

DATE MAILED: 08/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/678,783	<b>Applicant(s)</b> DAWES ET AL.	
	<b>Examiner</b> Frank Duong	<b>Art Unit</b> 2666	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 3-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3-11 and 17 is/are allowed.
- 6) ☒ Claim(s) 12-14 is/are rejected.
- 7) ☒ Claim(s) 15 and 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                        |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.   |

### DETAILED ACTION

1. Prosecution on the merits of this application is reopened on claims 12-14 considered unpatentable for the reasons indicated below:

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Chen et al (USP 5,793,976) (hereinafter "Chen").

Regarding **claim 12**, in accordance with Chen reference entirety, Chen discloses a method of determining performance (*"packet delay" pertaining Fig. 2-3 and "packet loss" pertaining Figs. 4-5*) of a route in a network (Figs. 2-5) (see *abstract pertaining cumulative delay along a virtual connection or col. 7, lines 2-3; "track the performance of each node along the virtual connection"*) comprising:

- a) determining a source network object (*Fig. 2; NODE1*);
- b) determining a destination network object (*Fig. 2; NODE3*);
- c) determining a route (virtual connection) through the network (Fig. 2) from the source network object (*Fig. 2; NODE1*) to the destination network object (*Fig. 2; NODE3*);

d) measuring the network performance (delay) of each node object on the route (*col. 7, lines 23-24 and thereafter*); and

e) aggregating the network performance obtained in step d) to obtain a total network performance for the route (*col. 8, lines 41-48 and thereafter*).

Regarding **claim 13**, in addition to features recited in base claim 12 (see rationales discussed above), Chen further discloses wherein said network performance is that of a packet's delay through said network element and said total network performance for the route is the total end to end delay for a packet traversing said route (virtual connection) (*col. 7, lines 20-27; col. 8, lines 41-48 and thereafter*).

Regarding **claim 14**, in addition to features recited in base claim 12 (see rationales discussed above), Chen further discloses wherein said network performance is that of a network element's drop rate of packets (packet loss) and said total network performance is the end to end transmission fraction (total cell loss) over a path (virtual connection) (*col. 10, lines 1-2 and thereafter*).

### ***Allowable Subject Matter***

3. Claims s 1, 3-11 and 17 allowed.

4. Claims 15-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record, considered individually or in combination, fails to fairly

Art Unit: 2666

show or suggest claimed invention comprising, among other limitation, a novel and unobvious limitation of obtaining a total routing through a network by combining routing for packets through each segment based on connection between non-routing objects, and between routing objects, structurally and functionally interconnected with other limitations in a manner as recited in claims 1, 3-10 and 17.

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record, considered individually or in combination, fails to fairly show or suggest claimed invention comprising, among other limitation, a novel and unobvious limitation of determining connections between network objects using the topology of the LAN segment, structurally and functionally interconnected with other limitations in a manner as recited in claim 11.

The claimed subject matters in the dependent claims 15-16 are also deemed to be novel and unobvious over the prior art of record.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hefel et al (USP 5,563,875).

Baidon et al (USP 5,699,348).


Mirek et al (USP 5,878,032).

Art Unit: 2666

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Duong whose telephone number is 571-272-3164. The examiner can normally be reached on 7:00AM-3:30PM, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**FRANK DUONG**  
**PRIMARY EXAMINER**

August 10, 2005